

Abstract

5       A pressure-released brake assembly restrains a  
projectile in a launch tube prior to launch and automatically  
releases the projectile at launch. A brake assembly housing  
defines cavities that extend substantially radially out from  
the projectile when the housing is attached thereto. A brake  
pad adjoins the housing and has holes formed therethrough  
with each hole being aligned with one of the housing's  
cavities. Means are provided for positioning a loose-fitting  
10       pin partially in each of the brake pad's holes and partially  
in a correspondingly aligned housing cavity. When a launch  
pressure is generated in the projectile's launch tube, the  
launch pressure acts on each pin via the holes in the brake  
pad. The launch pressure causes the positioning means to  
15       fail and drives each pin out of engagement with the brake pad  
to effectively uncouple the brake pad from the housing.